



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,453	09/27/2001	Koichi Hashimoto	24796	9553

7590 04/23/2003

NATH & ASSOCIATES
Sixth Floor
1030 Fifteenth Street, N.W.
Washington, DC 20005

EXAMINER

LIANG, LEONARD S

ART UNIT PAPER NUMBER

2853

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/963,453

Applicant(s)

HASHIMOTO, KOICHI

Examiner

Leonard S Liang

Art Unit

2853

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

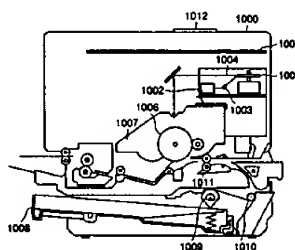
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higuchi (US Pat 6144457) in view of Horie et al (US Pat 5208640).

Higuchi discloses:

- {claim 1} A printing machine (figure 1);

FIG. 1



an image formation unit which serves to perform a printing operation on a printing sheet (figure 1); a paper feed unit which serves to supply the image formation units with printing sheets (figure 1, reference 1008); an error detection unit which serves to detect an error occurring in the printing machine (abstract; column 2, lines 1-12); a computer readable ROM (figure 2, reference 206) having an error classified table stored therein in which errors in the printing machine are classified (figure 3; column 1, lines 27-65; column 2, lines 1-12); a control unit

Art Unit: 2853

comprising a CPU connected to the ROM, the CPU having an error judgment computer program executed thereon (abstract; column 5, lines 34-50)

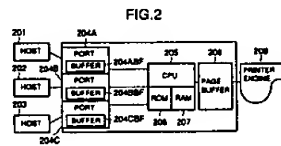


FIG. 3

CAUSE	CONTINUATION OF DATA PROCESSING WITHOUT OPERATOR
JAMMING	IMPOSSIBLE
NO PAPER	IMPOSSIBLE
NO TONER	IMPOSSIBLE
NO FONT	POSSIBLE
IMPROPER SIZE	POSSIBLE

- {claim 2} the control unit is capable of taking control of the printing machine in order to continue, without suspending, the printing operation when the control unit judges occurrence of an error with which the printing operation of at least one of the image formation units can be continued (abstract; column 1, lines 28-67; column 2, lines 1-12; column 5, lines 34-50)
- {claim 3} the control unit is capable of reporting the result of judgment to a user (figure 3; column 3, lines 13-32)
- {claim 4} the control unit is capable of reporting the result of judgment to a user (as taught in claim 3)
- {claim 5} the control unit is capable of reporting information of the penalty in throughput when a detected error is an error with which the printing operation of at least one of the image formation units can be continued (figure 3; column 3, lines 13-32)

- {claim 6} the control unit is capable of reporting information of the penalty in throughput when a detected error is an error with which the printing operation of at least one of the image formation units can be continued (as taught in claim 5)
- {claim 7} A method of reporting an error in a printing machine having an image formation unit which serves to perform a printing operation on a printing sheet; an error detecting step; an error look-up step; an error judging step; an error reporting step (figure 1; figure 3; column 1, lines 27-65; column 2, lines 1-12; column 3, lines 13-32)
- {claim 8} reporting information of the penalty in throughput when a detected error is an error with which the printing operation of at least one of the image formation units can be continued (as taught in claim 5)
- {claim 9} one of the CPU and the ROM are located remote from and connected to the printing machine via a network connection (figure 2)

Higuchi differs from the claimed invention in that it does not disclose:

- {claim 1} a plurality of image formation units; a printed sheet transportation unit which serves to transport the printing sheets having been printed from the image formation units to a common output location; the classified table including at least one error on an occurrence of which a printing operation of at least one of the image formation units can be continued while a printing operation of another of the image formation units must be halted, and at least one error on an occurrence of which printing operations of all of the image formation units must be halted; the computer program judges whether or not a detected error is an

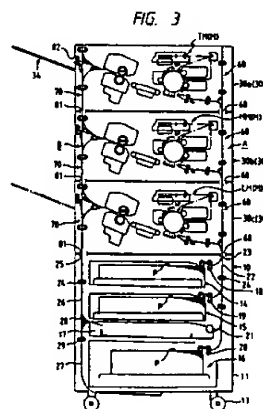
Art Unit: 2853

error with which a printing operation of at least one of the image formation units can be continued while a printing operation of another of the image formation units must be halted, or an error with which printing operations of all of the image formation units must be halted

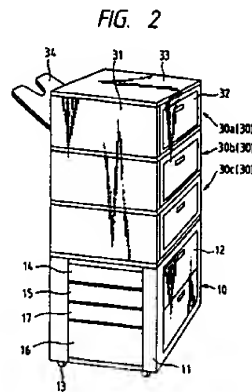
- {claim 7} plurality of image formation units; printed sheet transportation unit which serves to transport the printing sheet from the image formation units to a common output location; judging whether or not the detected error is an error with which the printing operation of at least one of the image formation units can be continued while a printing operation of another of the image formation units must be halted or an error with which the printing operation of all of the image formation units must be halted

Horie et al discloses:

- {claim 1} a plurality of image formation units (figure 3, reference TM, MM, LM; column 2, lines 17-19);



a printed sheet transportation unit which serves to transport the printing sheets having been printed from the image formation units to a common output location (figure 2, reference 34; column 2, lines 31-39)



- {claim 7} plurality of image formation units (as taught in claim 1); printed sheet transportation unit which serves to transport the printing sheet from the image formation units to a common output location (as taught in claim 1)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teachings of Horie et al into the invention of Higuchi so that there are a plurality of image formation units and a printed sheet transportation unit which serves to transport the printing sheets to a common output location. The motivation for the skilled artisan in doing so is to gain the benefit of avoiding an unwanted increase of installation area and troublesome management of recording sheets (column 2, lines 10-16). The combination naturally suggests that the classified table includes at least one error on an occurrence of which a printing operation of at least one of the image formation units can be continued while a printing operation of another of the image formation units must be halted, and at least one error on an occurrence of which printing operations of all of the image formation units must be halted, and

Art Unit: 2853

that the computer program judges whether or not a detected error is an error with which a printing operation of at least one of the image formation units can be continued while a printing operation of another of the image formation units must be halted, or an error with which printing operations of all of the image formation units must be halted.

Conclusion

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Morrell (US Pat 4745602) discloses a printer error and control system.

Beck (US Pat 6275299) discloses a multiple spooler printing system.

Kagita (US Pat 5620264) discloses an error control system for a printer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leonard S Liang whose telephone number is (703) 305-4754.

The examiner can normally be reached on 8:30-5 Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on (703) 308-2847. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

lsl iSL
April 17, 2003


JUDY NGUYEN
PRIMARY EXAMINER